

Armin Hansel

List of Publications by Year in descending order

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231
papers

22,052
citations

10351

72
h-index

11581

135
g-index

311
all docs

311
docs citations

311
times ranked

12479
citing authors

#	ARTICLE	IF	CITATIONS
1	On-line monitoring of volatile organic compounds at pptv levels by means of proton-transfer-reaction mass spectrometry (PTR-MS) medical applications, food control and environmental research. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1998, 173, 191-241.	1.9	1,438
2	Role of sulphuric acid, ammonia and galactic cosmic rays in atmospheric aerosol nucleation. <i>Nature</i> , 2011, 476, 429-433.	13.7	1,114
3	Molecular understanding of sulphuric acid-amine particle nucleation in the atmosphere. <i>Nature</i> , 2013, 502, 359-363.	13.7	774
4	Proton-transfer-reaction mass spectrometry (PTR-MS): on-line monitoring of volatile organic compounds at pptv levels. <i>Chemical Society Reviews</i> , 1998, 27, 347.	18.7	693
5	The Indian Ocean Experiment: Widespread Air Pollution from South and Southeast Asia. <i>Science</i> , 2001, 291, 1031-1036.	6.0	687
6	Proton transfer reaction mass spectrometry: on-line trace gas analysis at the ppb level. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1995, 149-150, 609-619.	1.9	623
7	The role of low-volatility organic compounds in initial particle growth in the atmosphere. <i>Nature</i> , 2016, 533, 527-531.	13.7	540
8	Ion-induced nucleation of pure biogenic particles. <i>Nature</i> , 2016, 533, 521-526.	13.7	528
9	Practical approaches to plant volatile analysis. <i>Plant Journal</i> , 2006, 45, 540-560.	2.8	494
10	Oxidation Products of Biogenic Emissions Contribute to Nucleation of Atmospheric Particles. <i>Science</i> , 2014, 344, 717-721.	6.0	456
11	High resolution PTR-TOF: Quantification and formula confirmation of VOC in real time. <i>Journal of the American Society for Mass Spectrometry</i> , 2010, 21, 1037-1044.	1.2	353
12	Biomass burning as a source of formaldehyde, acetaldehyde, methanol, acetone, acetonitrile, and hydrogen cyanide. <i>Geophysical Research Letters</i> , 1999, 26, 1161-1164.	1.5	313
13	Molecular understanding of atmospheric particle formation from sulfuric acid and large oxidized organic molecules. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 17223-17228.	3.3	300
14	Global atmospheric particle formation from CERN CLOUD measurements. <i>Science</i> , 2016, 354, 1119-1124.	6.0	289
15	Volatile organic compounds emitted after leaf wounding: On-line analysis by proton-transfer-reaction mass spectrometry. <i>Journal of Geophysical Research</i> , 1999, 104, 15963-15974.	3.3	277
16	Global budget of methanol: Constraints from atmospheric observations. <i>Journal of Geophysical Research</i> , 2005, 110, .	3.3	263
17	Acetone, methanol, and other partially oxidized volatile organic emissions from dead plant matter by abiological processes: Significance for atmospheric HOx chemistry. <i>Global Biogeochemical Cycles</i> , 1999, 13, 9-17.	1.9	246
18	Transport of biomass burning smoke to the upper troposphere by deep convection in the equatorial region. <i>Geophysical Research Letters</i> , 2001, 28, 951-954.	1.5	234

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19	Neutral molecular cluster formation of sulfuric acid–dimethylamine observed in real time under atmospheric conditions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 15019-15024.	3.3	208
20	Eddy covariance flux measurements of biogenic VOCs during ECHO 2003 using proton transfer reaction mass spectrometry. <i>Atmospheric Chemistry and Physics</i> , 2005, 5, 465-481.	1.9	200
21	Characterization of a BAHD acyltransferase responsible for producing the green leaf volatile (Z)-3-hexen-1-yl acetate in <i>Arabidopsis thaliana</i> . <i>Plant Journal</i> , 2007, 49, 194-207.	2.8	199
22	On-Line Monitoring of Microbial Volatile Metabolites by Proton Transfer Reaction-Mass Spectrometry. <i>Applied and Environmental Microbiology</i> , 2008, 74, 2179-2186.	1.4	199
23	Causes and importance of new particle formation in the present-day and preindustrial atmospheres. <i>Journal of Geophysical Research D: Atmospheres</i> , 2017, 122, 8739-8760.	1.2	198
24	Characterization of a real-time tracer for isoprene epoxydiols-derived secondary organic aerosol (IEPOX-SOA) from aerosol mass spectrometer measurements. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 11807-11833.	1.9	185
25	On the use of Tedlar® bags for breath-gas sampling and analysis. <i>Journal of Breath Research</i> , 2008, 2, 046001.	1.5	177
26	Rapid growth of new atmospheric particles by nitric acid and ammonia condensation. <i>Nature</i> , 2020, 581, 184-189.	13.7	169
27	Ozone induced emissions of biogenic VOC from tobacco: relationships between ozone uptake and emission of LOX products. <i>Plant, Cell and Environment</i> , 2005, 28, 1334-1343.	2.8	164
28	Multicomponent new particle formation from sulfuric acid, ammonia, and biogenic vapors. <i>Science Advances</i> , 2018, 4, eaau5363.	4.7	164
29	Fossil versus contemporary sources of fine elemental and organic carbonaceous particulate matter during the DAURE campaign in Northeast Spain. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 12067-12084.	1.9	157
30	Detection of Plant Volatiles after Leaf Wounding and Darkening by Proton Transfer Reaction –Time-of-Flight–Mass Spectrometry (PTR-TOF). <i>PLoS ONE</i> , 2011, 6, e20419.	1.1	152
31	Observations of gas- and aerosol-phase organic nitrates at BEACHON-RoMBAS 2011. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 8585-8605.	1.9	150
32	Seasonal variation of biogenic VOC emissions above a mixed hardwood forest in northern Michigan. <i>Geophysical Research Letters</i> , 2003, 30, n/a-n/a.	1.5	147
33	On-line breath analysis with PTR-TOF. <i>Journal of Breath Research</i> , 2009, 3, 027004.	1.5	147
34	Title is missing!. <i>Journal of Atmospheric Chemistry</i> , 2001, 38, 133-166.	1.4	145
35	Products of Ozone-Initiated Chemistry in a Simulated Aircraft Environment. <i>Environmental Science & Technology</i> , 2005, 39, 4823-4832.	4.6	143
36	The Arctic Summer Cloud Ocean Study (ASCOS): overview and experimental design. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 2823-2869.	1.9	140

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37	Contribution of Different Carbon Sources to Isoprene Biosynthesis in Poplar Leaves. <i>Plant Physiology</i> , 2004, 135, 152-160.	2.3	133
38	Accretion Product Formation from Self- and Cross-Reactions of RO ₂ Radicals in the Atmosphere. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 3820-3824.	7.2	133
39	Endogenous Production of Methanol after the Consumption of Fruit. <i>Alcoholism: Clinical and Experimental Research</i> , 1997, 21, 939-943.	1.4	128
40	Organosulfates as Tracers for Secondary Organic Aerosol (SOA) Formation from 2-Methyl-3-Buten-2-ol (MBO) in the Atmosphere. <i>Environmental Science & Technology</i> , 2012, 46, 9437-9446.	4.6	128
41	Signatures of terminal alkene oxidation in airborne formaldehyde measurements during TexAQS 2000. <i>Journal of Geophysical Research</i> , 2003, 108, n/a-n/a.	3.3	126
42	Analysis of Compounds in Human Breath after Ingestion of Garlic Using Proton-Transfer-Reaction Mass Spectrometry. <i>Journal of Agricultural and Food Chemistry</i> , 1996, 44, 3778-3782.	2.4	124
43	In situ secondary organic aerosol formation from ambient pine forest air using an oxidation flow reactor. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 2943-2970.	1.9	122
44	Aerosol composition and sources in the central Arctic Ocean during ASCOS. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 10619-10636.	1.9	120
45	Rapid growth of organic aerosol nanoparticles over a wide tropospheric temperature range. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 9122-9127.	3.3	118
46	First eddy covariance flux measurements by PTR-TOF. <i>Atmospheric Measurement Techniques</i> , 2010, 3, 387-395.	1.2	117
47	Acetonitrile and benzene in the breath of smokers and non-smokers investigated by proton transfer reaction mass spectrometry (PTR-MS). <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1995, 148, L1-L3.	1.9	116
48	The effect of acid-base clustering and ions on the growth of atmospheric nano-particles. <i>Nature Communications</i> , 2016, 7, 11594.	5.8	116
49	PTR3: An Instrument for Studying the Lifecycle of Reactive Organic Carbon in the Atmosphere. <i>Analytical Chemistry</i> , 2017, 89, 5824-5831.	3.2	112
50	High spatial and temporal resolution measurements of primary organics and their oxidation products over the tropical forests of Surinam. <i>Atmospheric Environment</i> , 2000, 34, 1161-1165.	1.9	111
51	Title is missing!. <i>Journal of Atmospheric Chemistry</i> , 2001, 38, 167-185.	1.4	111
52	Characterization of carbonaceous aerosols outflow from India and Arabia: Biomass/biofuel burning and fossil fuel combustion. <i>Journal of Geophysical Research</i> , 2003, 108, .	3.3	109
53	Reduced anthropogenic aerosol radiative forcing caused by biogenic new particle formation. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2016, 113, 12053-12058.	3.3	107
54	Eddy covariance VOC emission and deposition fluxes above grassland using PTR-TOF. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 611-625.	1.9	104

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55	Atmospheric benzenoid emissions from plants rival those from fossil fuels. <i>Scientific Reports</i> , 2015, 5, 12064.	1.6	104
56	Conversion of hydroperoxides to carbonyls in field and laboratory instrumentation: Observational bias in diagnosing pristine versus anthropogenically controlled atmospheric chemistry. <i>Geophysical Research Letters</i> , 2014, 41, 8645-8651.	1.5	99
57	Effect of ions on sulfuric acid-water binary particle formation: 2. Experimental data and comparison with QC-normalized classical nucleation theory. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 1752-1775.	1.2	99
58	Technical Note: Intercomparison of formaldehyde measurements at the atmosphere simulation chamber SAPHIR. <i>Atmospheric Chemistry and Physics</i> , 2008, 8, 2189-2200.	1.9	97
59	Role of iodine oxoacids in atmospheric aerosol nucleation. <i>Science</i> , 2021, 371, 589-595.	6.0	94
60	Air Pollution Transport in an Alpine Valley: Results From Airborne and Ground-Based Observations. <i>Boundary-Layer Meteorology</i> , 2009, 131, 441-463.	1.2	93
61	Real-time monitoring of herbivore induced volatile emissions in the field. <i>Physiologia Plantarum</i> , 2010, 138, 123-133.	2.6	93
62	Effect of water vapour pressure on monoterpene measurements using proton transfer reaction-mass spectrometry (PTR-MS). <i>International Journal of Mass Spectrometry</i> , 2004, 239, 161-169.	0.7	92
63	Trace gas exchange and gas phase chemistry in a Norway spruce forest: A study with a coupled 1-dimensional canopy atmospheric chemistry emission model. <i>Atmospheric Environment</i> , 2006, 40, 28-42.	1.9	91
64	Organic trace gas measurements by PTR-MS during INDOEX 1999. <i>Journal of Geophysical Research</i> , 2002, 107, INX2 23-1.	3.3	89
65	Biogenic emission measurement and inventories determination of biogenic emissions in the eastern United States and Texas and comparison with biogenic emission inventories. <i>Journal of Geophysical Research</i> , 2010, 115, .	3.3	89
66	Detection of isoprene in expired air from human subjects using proton-transfer-reaction mass spectrometry. , 1997, 11, 1230-1234.		88
67	A product study of the isoprene+NO ₃ reaction. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 4945-4956.	1.9	88
68	Xylem-transported glucose as an additional carbon source for leaf isoprene formation in <i>Quercus robur</i> . <i>New Phytologist</i> , 2002, 156, 171-178.	3.5	87
69	Contrasting winter and summer VOC mixing ratios at a forest site in the Western Mediterranean Basin: the effect of local biogenic emissions. <i>Atmospheric Chemistry and Physics</i> , 2011, 11, 13161-13179.	1.9	85
70	Characterization of the mass-dependent transmission efficiency of a CIMS. <i>Atmospheric Measurement Techniques</i> , 2016, 9, 1449-1460.	1.2	85
71	On the composition of ammonia-sulfuric-acid ion clusters during aerosol particle formation. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 55-78.	1.9	84
72	Energy dependencies of the proton transfer reactions. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1997, 167-168, 697-703.	1.9	83

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73	Simulation chamber investigation of the reactions of ozone with short-chain alkenes. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	83
74	Comparison of different real time VOC measurement techniques in a ponderosa pine forest. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 2893-2906.	1.9	83
75	Buffered end-tidal (BET) sampling—a novel method for real-time breath-gas analysis. <i>Journal of Breath Research</i> , 2008, 2, 037008.	1.5	82
76	Accretion Product Formation from Ozonolysis and OH Radical Reaction of α -Pinene: Mechanistic Insight and the Influence of Isoprene and Ethylene. <i>Environmental Science & Technology</i> , 2018, 52, 11069-11077.	4.6	81
77	Intercomparison of oxygenated volatile organic compound measurements at the SAPHIR atmosphere simulation chamber. <i>Journal of Geophysical Research</i> , 2008, 113, .	3.3	78
78	Transient Release of Oxygenated Volatile Organic Compounds during Light-Dark Transitions in Grey Poplar Leaves. <i>Plant Physiology</i> , 2004, 135, 1967-1975.	2.3	77
79	Selective measurements of isoprene and 2-methyl-3-buten-2-ol based on NO ⁺ ionization mass spectrometry. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 11877-11884.	1.9	76
80	Carbonyl sulfide (COS) as a tracer for canopy photosynthesis, transpiration and stomatal conductance: potential and limitations. <i>Plant, Cell and Environment</i> , 2012, 35, 657-667.	2.8	74
81	Proton transfer reaction mass spectrometry (PTR-MS): propanol in human breath. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1996, 154, 61-70.	1.9	73
82	Intercomparison of ammonia measurement techniques at an intensively managed grassland site (Oensingen, Switzerland). <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 2635-2645.	1.9	73
83	Improved detection limit of the proton-transfer reaction mass spectrometer: on-line monitoring of volatile organic compounds at mixing ratios of a few pptv. <i>Rapid Communications in Mass Spectrometry</i> , 1998, 12, 871-875.	0.7	72
84	Observations of glyoxal and formaldehyde as metrics for the anthropogenic impact on rural photochemistry. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 9529-9543.	1.9	71
85	Experimental particle formation rates spanning tropospheric sulfuric acid and ammonia abundances, ion production rates, and temperatures. <i>Journal of Geophysical Research D: Atmospheres</i> , 2016, 121, 12,377.	1.2	71
86	A method for real-time detection of PAN, PPN and MPAN in ambient air. <i>Geophysical Research Letters</i> , 2000, 27, 895-898.	1.5	70
87	VOC emissions from Norway spruce (<i>Picea abies</i> L. [Karst]) twigs in the field—Results of a dynamic enclosure study. <i>Atmospheric Environment</i> , 2006, 40, 128-137.	1.9	70
88	O ₂ ⁺ as reagent ion in the PTR-MS instrument: Detection of gas-phase ammonia. <i>International Journal of Mass Spectrometry</i> , 2007, 265, 382-387.	0.7	69
89	Molecular understanding of new-particle formation from α -pinene between \sim 50 and +25 °C. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 9183-9207.	1.9	68
90	PTR-MS real time monitoring of the emission of volatile organic compounds during postharvest aging of berryfruit. <i>Postharvest Biology and Technology</i> , 1999, 17, 143-151.	2.9	67

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91	Automobile Emissions of Acetonitrile: Assessment of its Contribution to the Global Source. <i>Journal of Atmospheric Chemistry</i> , 2001, 38, 187-193.	1.4	66
92	Comprehensive characterization of atmospheric organic carbon at a forested site. <i>Nature Geoscience</i> , 2017, 10, 748-753.	5.4	66
93	Qualitative and Quantitative Characterization of Volatile Organic Compound Emissions from Cut Grass. <i>Environmental Science & Technology</i> , 2012, 46, 3859-3865.	4.6	63
94	Evaluation of HO ₂ sources and cycling using measurement-constrained model calculations in a 2-methyl-3-butene-2-ol (MBO) and monoterpene (MT) dominated ecosystem. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 2031-2044.	1.9	62
95	Overview of the Manitou Experimental Forest Observatory: site description and selected science results from 2008 to 2013. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 6345-6367.	1.9	62
96	Microbial community related to volatile organic compound (VOC) emission in household biowaste. <i>Environmental Microbiology</i> , 2006, 8, 1960-1974.	1.8	61
97	Biogenic carbonyl compounds within and above a coniferous forest in Germany. <i>Atmospheric Environment</i> , 2006, 40, 81-91.	1.9	61
98	Size-dependent influence of NO _x on the growth rates of organic aerosol particles. <i>Science Advances</i> , 2020, 6, eaay4945.	4.7	61
99	Analysis of trace gases at ppb levels by proton transfer reaction mass spectrometry (PTR-MS). <i>Plasma Sources Science and Technology</i> , 1997, 6, 111-117.	1.3	60
100	The World is Not Flat: Implications for the Global Carbon Balance. <i>Bulletin of the American Meteorological Society</i> , 2014, 95, 1021-1028.	1.7	60
101	Proton-transfer-reaction mass spectrometry (PTR-MS): on-line monitoring of volatile organic compounds at volume mixing ratios of a few pptv. <i>Plasma Sources Science and Technology</i> , 1999, 8, 332-336.	1.3	58
102	Vertical profiling of aerosol particles and trace gases over the central Arctic Ocean during summer. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 12405-12431.	1.9	58
103	Enhanced growth rate of atmospheric particles from sulfuric acid. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 7359-7372.	1.9	58
104	Secondary organic aerosol formation from in situ OH, O ₃ , and NO ₃ ; oxidation of ambient forest air in an oxidation flow reactor. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 5331-5354.	1.9	57
105	Fast Peroxy Radical Isomerization and OH Recycling in the Reaction of OH Radicals with Dimethyl Sulfide. <i>Journal of Physical Chemistry Letters</i> , 2019, 10, 6478-6483.	2.1	57
106	Missing peroxy radical sources within a summertime ponderosa pine forest. <i>Atmospheric Chemistry and Physics</i> , 2014, 14, 4715-4732.	1.9	56
107	Plant surface reactions: an opportunistic ozone defence mechanism impacting atmospheric chemistry. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 277-292.	1.9	56
108	Influence of temperature on the molecular composition of ions and charged clusters during pure biogenic nucleation. <i>Atmospheric Chemistry and Physics</i> , 2018, 18, 65-79.	1.9	56

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109	Applications of proton transfer reactions to gas analysis. <i>International Journal of Mass Spectrometry and Ion Processes</i> , 1994, 134, 55-66.	1.9	55
110	Observation of viscosity transition in α -pinene secondary organic aerosol. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 4423-4438.	1.9	55
111	Title is missing!. <i>Journal of Atmospheric Chemistry</i> , 2001, 38, 115-132.	1.4	53
112	PTR-MS Assessment of Photocatalytic and Sorption-Based Purification of Recirculated Cabin Air during Simulated 7-h Flights with High Passenger Density. <i>Environmental Science & Technology</i> , 2007, 41, 229-234.	4.6	52
113	Long-term measurements of CO, NO, NO ₂ , benzene, toluene and PM ₁₀ at a motorway location in an Austrian valley. <i>Atmospheric Environment</i> , 2008, 42, 1012-1024.	1.9	52
114	Formation of Highly Oxygenated Organic Molecules from α -Pinene Ozonolysis: Chemical Characteristics, Mechanism, and Kinetic Model Development. <i>ACS Earth and Space Chemistry</i> , 2019, 3, 873-883.	1.2	52
115	Insight into Acid-Base Nucleation Experiments by Comparison of the Chemical Composition of Positive, Negative, and Neutral Clusters. <i>Environmental Science & Technology</i> , 2014, 48, 13675-13684.	4.6	51
116	Acetone and acetonitrile in the tropical Indian Ocean boundary layer and free troposphere: Aircraft-based intercomparison of AP-CIMS and PTR-MS measurements. <i>Journal of Geophysical Research</i> , 2001, 106, 28511-28527.	3.3	50
117	The role of ions in new particle formation in the CLOUD chamber. <i>Atmospheric Chemistry and Physics</i> , 2017, 17, 15181-15197.	1.9	50
118	Undisturbed and disturbed above canopy ponderosa pine emissions: PTR-TOF-MS measurements and MEGAN 2.1 model results. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 11935-11947.	1.9	49
119	Effects of sources and meteorology on particulate matter in the Western Mediterranean Basin: An overview of the DAURE campaign. <i>Journal of Geophysical Research D: Atmospheres</i> , 2014, 119, 4978-5010.	1.2	49
120	Molecular understanding of the suppression of new-particle formation by isoprene. <i>Atmospheric Chemistry and Physics</i> , 2020, 20, 11809-11821.	1.9	49
121	Methanol in Human Breath. <i>Alcoholism: Clinical and Experimental Research</i> , 1995, 19, 1147-1150.	1.4	47
122	Aqueous phase oxidation of sulphur dioxide by ozone in cloud droplets. <i>Atmospheric Chemistry and Physics</i> , 2016, 16, 1693-1712.	1.9	47
123	Volatile organic compounds in the western Mediterranean basin: urban and rural winter measurements during the DAURE campaign. <i>Atmospheric Chemistry and Physics</i> , 2013, 13, 4291-4306.	1.9	46
124	Experimental investigation of ion-ion recombination under atmospheric conditions. <i>Atmospheric Chemistry and Physics</i> , 2015, 15, 7203-7216.	1.9	46
125	Trace gas monitoring at the Mauna Loa Baseline Observatory using Proton-Transfer Reaction Mass Spectrometry. <i>International Journal of Mass Spectrometry</i> , 2003, 223-224, 527-538.	0.7	45
126	Thermochemistry of HNC, HNC ⁺ , and CF ₃ ⁺ . <i>Journal of Chemical Physics</i> , 1998, 109, 1748-1750.	1.2	44

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127	A relaxed-eddy-accumulation method for the measurement of isoprenoid canopy-fluxes using an online gas-chromatographic technique and PTR-MS simultaneously. <i>Atmospheric Environment</i> , 2006, 40, 43-54.	1.9	44
128	Development of a Proton-Transfer Reaction-Linear Ion Trap Mass Spectrometer for Quantitative Determination of Volatile Organic Compounds. <i>Analytical Chemistry</i> , 2008, 80, 8171-8177.	3.2	44
129	Implementation of proton transfer reaction-mass spectrometry (PTR-MS) for advanced bioprocess monitoring. <i>Biotechnology and Bioengineering</i> , 2012, 109, 3059-3069.	1.7	44
130	Observations of Diurnal to Weekly Variations of Monoterpene-Dominated Fluxes of Volatile Organic Compounds from Mediterranean Forests: Implications for Regional Modeling. <i>Environmental Science & Technology</i> , 2013, 47, 11073-11082.	4.6	44
131	Detection of RO ₂ radicals and other products from cyclohexene ozonolysis with NH ₄ ⁺ and acetate chemical ionization mass spectrometry. <i>Atmospheric Environment</i> , 2018, 186, 248-255.	1.9	44
132	Nighttime isoprene trends at an urban forested site during the 1999 Southern Oxidant Study. <i>Journal of Geophysical Research</i> , 2002, 107, ACH 7-1.	3.3	43
133	Turbulent exchange and segregation of HO ₂ radicals and volatile organic compounds above a deciduous forest. <i>Atmospheric Chemistry and Physics</i> , 2010, 10, 6215-6235.	1.9	43
134	BVOC fluxes above mountain grassland. <i>Biogeosciences</i> , 2010, 7, 1413-1424.	1.3	43
135	First oxidation products from the reaction of hydroxyl radicals with isoprene for pristine environmental conditions. <i>Communications Chemistry</i> , 2019, 2, .	2.0	43
136	Variability-lifetime relationship for organic trace gases: A novel aid to compound identification and estimation of HO concentrations. <i>Journal of Geophysical Research</i> , 2000, 105, 20473-20486.	3.3	42
137	Methanol measurements in the lower troposphere near Innsbruck (047°16'N; 011°24'E), Austria. <i>Atmospheric Environment</i> , 2001, 35, 2525-2532.	1.9	41
138	On the performance of proton-transfer-reaction mass spectrometry for breath-relevant gas matrices. <i>Measurement Science and Technology</i> , 2013, 24, 125003.	1.4	41
139	Characterisation of organic contaminants in the CLOUD chamber at CERN. <i>Atmospheric Measurement Techniques</i> , 2014, 7, 2159-2168.	1.2	41
140	Effects of heat and drought stress on post-illumination bursts of volatile organic compounds in isoprene-emitting and non-emitting poplar. <i>Plant, Cell and Environment</i> , 2016, 39, 1204-1215.	2.8	41
141	Substrate-induced volatile organic compound emissions from compost-amended soils. <i>Biology and Fertility of Soils</i> , 2010, 46, 371-382.	2.3	40
142	Spatial distribution of aerosols in the Inn Valley atmosphere during wintertime. <i>Meteorology and Atmospheric Physics</i> , 2009, 103, 223-235.	0.9	39
143	Improved peak analysis of signals based on counting systems: Illustrated for proton-transfer-reaction time-of-flight mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 2010, 295, 72-77.	0.7	39
144	Disjunct eddy covariance measurements of monoterpene fluxes from a Norway spruce forest using PTR-MS. <i>International Journal of Mass Spectrometry</i> , 2004, 239, 111-115.	0.7	38

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145	First observation of a potential non-invasive breath gas biomarker for kidney function. <i>Journal of Breath Research</i> , 2013, 7, 017110.	1.5	38
146	The driving factors of new particle formation and growth in the polluted boundary layer. <i>Atmospheric Chemistry and Physics</i> , 2021, 21, 14275-14291.	1.9	38
147	Deposition fluxes of terpenes over grassland. <i>Journal of Geophysical Research</i> , 2011, 116, .	3.3	37
148	Analysis of high mass resolution PTR-TOF mass spectra from 1,3,5-trimethylbenzene (TMB) environmental chamber experiments. <i>Atmospheric Chemistry and Physics</i> , 2012, 12, 829-843.	1.9	37
149	Quantification of passive smoking using proton-transfer-reaction mass spectrometry. <i>International Journal of Mass Spectrometry</i> , 1998, 178, L1-L4.	0.7	35
150	Experiments on forest/atmosphere exchange: Climatology and fluxes during two summer campaigns in NE Bavaria. <i>Atmospheric Environment</i> , 2006, 40, 3-20.	1.9	35
151	A multimethodological approach to study the spatial distribution of air pollution in an Alpine valley during wintertime. <i>Atmospheric Chemistry and Physics</i> , 2009, 9, 3385-3396.	1.9	35
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